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Assistance in the Preparation of Scientific Articles in the National Journal for Teachers

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Abstract

Writing scientific papers aims to express ideas, thoughts and information in the form of writing and a writer is able to distinguish between opinions and facts. The purpose of the service is to improve the ability of teacher professionalism by equipping teachers in terms of strategies for compiling scientific papers correctly in accordance with writing guidelines, and equipping teachers in procedures for publishing scientific articles in accredited journals scientific publications for teachers who are prerequisites for promotion and position, so as to motivate teachers to make more quality scientific work. The method of implementing assistance in writing scientific articles includes activity steps that emphasize the learning process. This mentoring activity is built on the basis of active participation (participation) of trainees in all aspects of training activities, starting from planning, implementation, to the assessment stage of learning activities in training. The implementation of assistance in the preparation of scientific articles in the National Journal for teachers of SMKN 1 Sawit Boyolali is divided into three groups of speakers as follows, namely: 1) Format of writing scientific articles 2) Mendeley, 3) Online Journal System. The results achieved in this activity are that teachers have increased the motivation of teachers to write papers, conceptual articles and research articles and can increase the understanding, ability and skills of teachers writing scientific papers. Teachers have a basic understanding of how to identify, select and formulate topics and titles, compile outlines, collect writing materials, organize, and conceptualize writing, as well as scientific writing and editing using mendeley software. 63.6% of teachers have the intention to write articles in scientific journals. Teachers enthusiastically participate in community service activities that are attended by 100% of the stipulated conditions. Teachers are able to understand the rules and procedures in writing scientific papers, the process of stages in making articles and guidance in publishing articles with the help of mendeley software.

Keywords: Mentoring, Imiah Articles, Medeley, Online Journal System

INTRODUCTION

Scientific work is one of the obligations that must be fulfilled by teachers as a requirement for increasing career paths (rank/class) based on Permenpan RB number Per/16/MENPAN-RB/11/2009 dated November 10, 2009, about: Teachers' Functional Positions and Credit Scores. Scientific work is written work by applying scientific conventions (Brew & Wekke, 2018). Writing scientific papers aims to express ideas, thoughts and information in the form of writing (Yuliati, 2019). A journal article is an elaborate on the facts of scientific information. The principle that must be known and understood in writing scientific papers is how a writer is able to distinguish between opinions and facts, (Nur, Sabara, & Wekke, 2018). Currently, writing scientific papers in the form of scientific journals is still a burden for teachers. This is due to the limited knowledge they have about the technicalities of writing good scientific journals. Some of the scientific works they produce are often not in accordance with the rules for preparing scientific journals, and many plagiarism works are even found.

There are several aspects that are required to improve professionalism, one of which is improving the ability of teachers through scientific work / research results. The number of teachers of SMKN 1 Sawit Boyolali Regency is quite large. Obtained fact data about the ability of teachers to write scientific papers is very minimal. This is because, among others, 1) Teachers' knowledge about writing scientific articles is low, teachers still find it difficult to conduct class-based research which leads to

low scientific publications, so that real facts have an impact on the promotion of teachers / classes (sumber survei, 2023). In accordance with the Law on Teachers and Lecturers Based on this, it is necessary to conduct training for teachers, especially teachers of SMKN1 Sawit Kabupate. Boyolali about procedures for writing good scientific journals and meeting scientific standards. Teachers have three main tasks and functions (TUPOKSI), namely: education, the learning process, and professional development as a support for the learning process. Scientific journals are included in the development of the teaching profession. Therefore, a professional teacher is required to be able to produce works / publications in the form of scientific journals. Meanwhile, lecturers have tasks called Tri Darma Perguruan Tinggi, namely: Teaching, research, and community service. Providing information and training to teachers about scientific publications is part of community service. Training in writing scientific publications for teachers is becoming very urgent today. This is because there will be no professional teachers if teachers are not able to write scientific publications. Meanwhile, on the other hand, the progress of a nation is also largely determined by the quality of its educators. So through this training, it is hoped that it can help realize professional teachers who are able to write publications in scientific journals. The lack of insight and knowledge of teachers about scientific publications is the main problem that occurs today. As a result of this problem, creating teachers who are not professional in their fields. This is also an obstacle for teachers to move up the ranks. The problem faced by teachers of SMK Negeri 1 Sawit Boyolali is that there are still low teachers who have the ability to publish scientifically in accredited national journals. In addition, based on teacher portfolio data, as well as random interviews, there are still several teachers of SMK Negeri 1 Sawit Boyolali, hampered in proposing promotion / class through the path of writing scientific papers. Based on the problems faced by SMK Negeri 1 Sawit Boyolali above, the solution that will be implemented in solving partner problems is in the form of assistance in the preparation of scientific article publications in accredited national journals for teachers of SMK Negeri 1 Sawit Boyolali. This training is expected to develop the insight of teachers, especially at the vocational level, on how to make good publications and avoid plagiarism, so that they can become professional teachers. It is hoped that in the future teachers who take part in the training can produce scientific publications in accredited journals. Assistance for SMKN1 Sawit teachers is an effort to improve the competence of educators in solving problems in classroom action research faced during learning, further outlined in the form of scientific paper articles. The purpose of the service is to improve the ability of teacher professionalism by equipping teachers in terms of strategies for compiling scientific papers correctly in accordance with writing guidelines, and equipping teachers in procedures for publishing scientific articles in accredited journals scientific publications for teachers who are prerequisites for promotion and position, so as to motivate teachers to make more quality scientific work. The benefits of this training activity are so that teachers have sufficient knowledge in compiling higher quality scientific papers, producing scientific articles published in national journals, and having increased motivation in writing scientific papers, promotion and increasing teacher class. In mentoring activities, two stages are carried out.

METHOD

The model of assistance in writing scientific articles in national journals for teachers of SMK Negeri 1 Sawit Boyolali, includes activity steps that emphasize the learning process. Learning activities in this mentoring are built on the basis of active participation (participation) of trainees in all aspects of training activities, ranging from planning, implementation, to the assessment stage of learning activities in training. The efforts made by instructors in principle are more emphasized on motivation and involve the activities of trainees, in order to find out the extent of understanding and difficulties experienced by teachers when writing and compiling scientific articles to the publication of national journals.

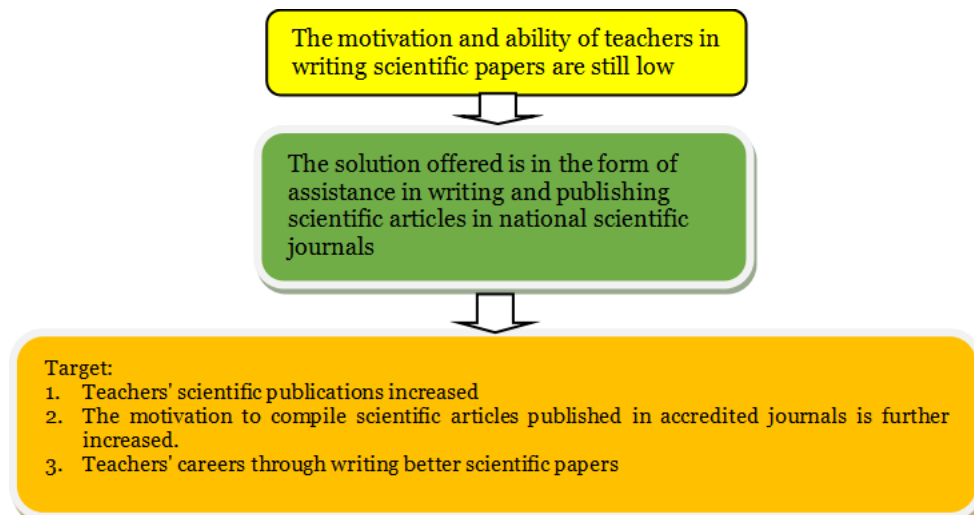


Figure 1 . Problem Schema, Solutions, and Output Targets

The Strategy of Training Activities Implementation Mechanism is as follows:

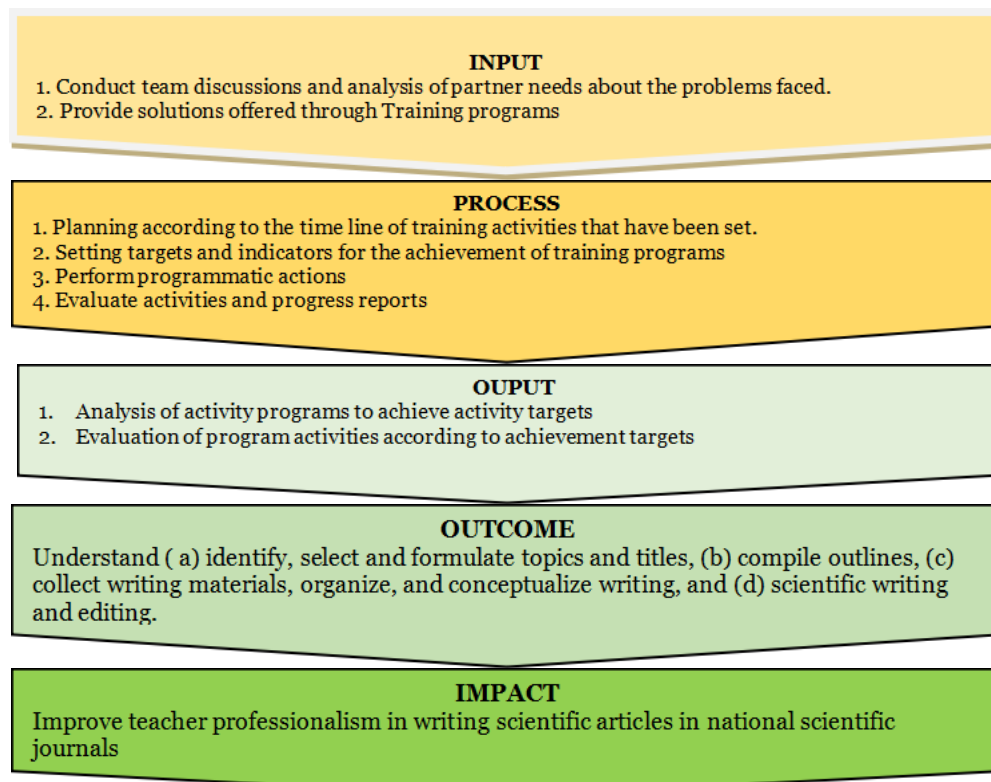


Figure 2. Training Program Implementation Mechanism Strategy

The activity was carried out for two meetings, located at SMKN 1 Sawit. The first meeting was the delivery of training materials covering the technical writing of scientific articles, the use of Mendeley software for writing literature, and the use of the Online Journal System (OJS). After receiving training materials, teachers were given the opportunity to compile scientific articles for two weeks, then continued the next meeting was mentoring and evaluation of articles that had been compiled so that they were ready to be registered in national journals. The description of the flow of methods for implementing training program activities is as follows:

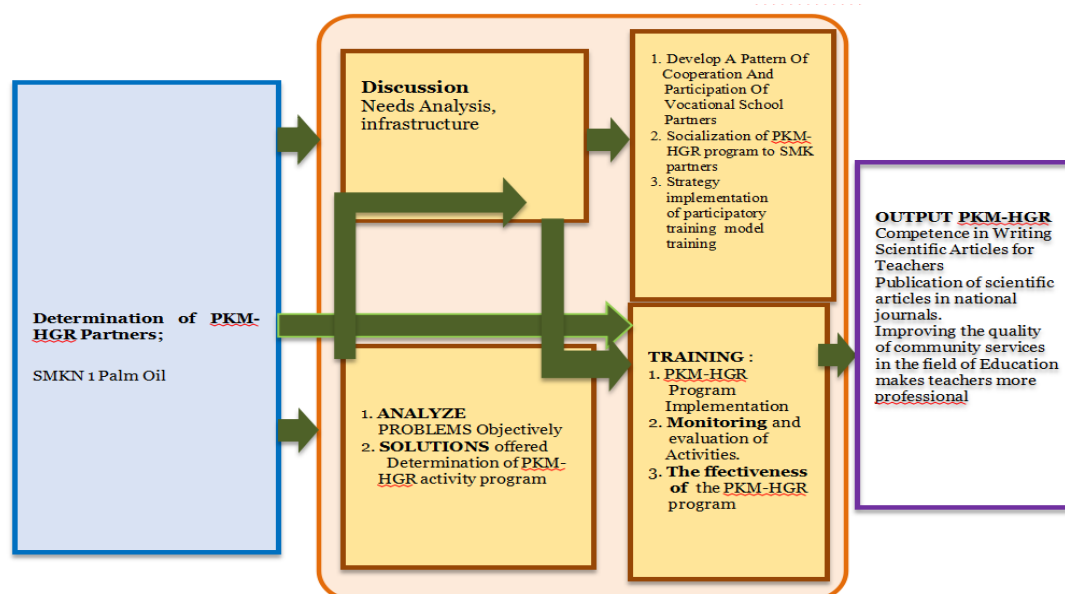


Figure 3. Method Flow of Implementation of Training program activities

1. Preparatory Stage

At this stage, the Community Service Team visited SMK Negeri 1 Sawit Boyolali to discuss the timing of community service activities. In addition, socializing activities about preparing draft scientific articles. After that, discuss what materials will be given by the Team to participants. Then the team collects data with literature studies to compile the material to be given. In order for the implementation of the training to run smoothly without problems, the team coordinated with the laboratory staff of SMK Negeri 1 Sawit Boyolali to provide information on the Mendeley software that will be used during the training so that it is already on the computer that will be used during the training.

2. Implementation Phase

The activity was carried out for two meetings, located at SMKN 1 Sawit. The first meeting was the delivery of training materials covering the technical writing of scientific articles, the use of Mendeley software for writing literature, and the use of the Online Journal System (OJS). After receiving training materials, teachers were given the opportunity to compile scientific articles for two weeks, then continued the next meeting was mentoring and evaluation of articles that had been compiled so that they were ready to be registered in national journals.

The participants of the scientific article writing training, looked very enthusiastic. Some participants were initially unfamiliar with the Mendeley software and the use of the Online Journal System (OJS), therefore in order to attract the attention of participants we delivered an explanation of the *Mendeley software* and the use of *the Online Journal System (OJS)* then showed several scientific papers that had been published in accredited National journals for learning and presented video examples of the application *Mendeley software* as well as the use of *Online Journal System (OJS)*.

This made participants very enthusiastic about participating in the training on the application of *Mendeley software*. After the training, teachers felt interested in mastering the application of *Mendeley software* and the deeper use of *the Online Journal System (OJS)* which could later be used as a preparation of article manuscripts that were ready to be published in national journals.

RESULTS AND DISCUSSION

a. Place and Time of Activity

Assistance in the preparation of scientific articles in the National Journal for teachers of SMKN 1 Sawit Boyolali was carried out in the Computer Vocational Competency laboratory of TKJ SMK Negeri 1 Sawit Address: Jl. Solo-Jogya KM. 15, Bendosari, Palm Oil, Boyolali. To prepare the computer to be used involves the laboratory of SMK N 1 Sawit. The event starts at 09.00 WIB until 17.00 WIB.

b. Pre-mentoring evaluation

Before assisting the preparation of scientific articles in national journals, a needs analysis evaluation was carried out. The needs analysis is more based on the difficulty factors of the teacher participants faced in writing scientific articles. The results of the needs analysis can be summarized that: 1) difficulty in determining topics and titles by 45.5%. 2) Determining the type and method of research reached 72.7%. 3) The ability to compile research instruments reached 63.6%. 4) Ability to collect data by 45.4%. 5) Teacher's ability to conduct data analysis by 63.6%. 6) Ability in compiling library database by 45.5%. 7) Teacher's ability to choose journal targets is 54.5%. The results of the evaluation of pre-mentoring analysis in the field in detail are as follows:

- 1) The results of the valuation of assistance in the preparation of scientific articles in national journals

How many articles have been published in scientific journals over the past five years?

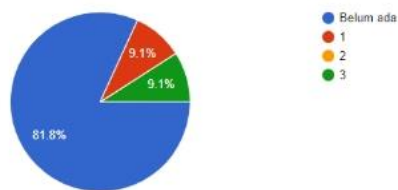


Figure 4. Diagram of the number of articles published in scientific journals over the past five years

Are you willing to continue this activity to the stage of consultation and assistance in writing scientific articles online?

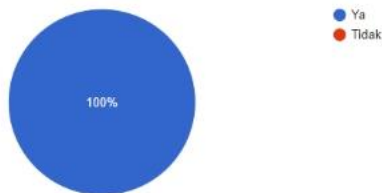


Figure 5. Sustainability of the mentoring stage

Do you already have a draft of a scientific article to submit to a journal?

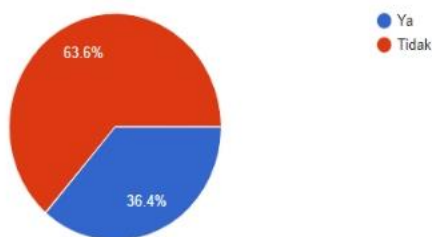


Figure 6. Readiness of draft scientific articles to submit to journals

Analysis of trainee evaluation of difficulties encountered in writing scientific articles

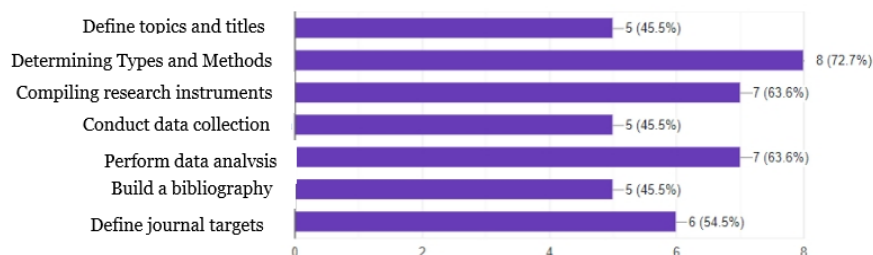


Figure 7. Diagram of difficulties encountered in writing scientific articles

c. Post-mentoring evaluation

The implementation of assistance in the preparation of scientific articles in the National Journal for teachers of SMKN 1 Sawit Boyolali is divided into three groups of speakers as follows, namely: 1) Format of writing scientific articles 2) Mendeley, 3) Online Journal System. The opening was conducted by the Principal of SMKN Sawit Boyolali at 09.00. Followed by the delivery of session 1 and 2 material on writing scientific articles and Mendeley by Mr. Dwi Maryono. Furthermore, the 3rd material about the *online Journal System* was delivered by Mr. Yudianto Sujana, who in the training process was accompanied by the P2M Team involving PTIK Students named Krisna Murti. In the process of implementing this activity using power point media, and Mendeley *software* to make it easier for speakers to deliver material besides that it can also help participants to make it easier to understand the material, this can also increase the participation of the participants (Kudsiyah, 2017). Training results show 63.6% of teachers need training. Training materials can be accepted and applied easily by 45.5%. Training is delivered in a clear sequence and systematics of 45.5%. Teachers have mastered the material presented by 54.5%. Enthusiasm in the question and answer opportunity of 54.5%. Teacher motivation in writing articles in scientific journals is 63.6%. The following is an overview of the results of the post-training evaluation:

1). Training materials according to teacher needs

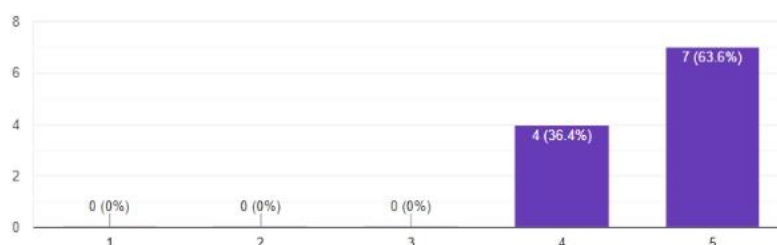


Figure 8. Training materials according to teacher needs

2). Training materials can be received and applied easily

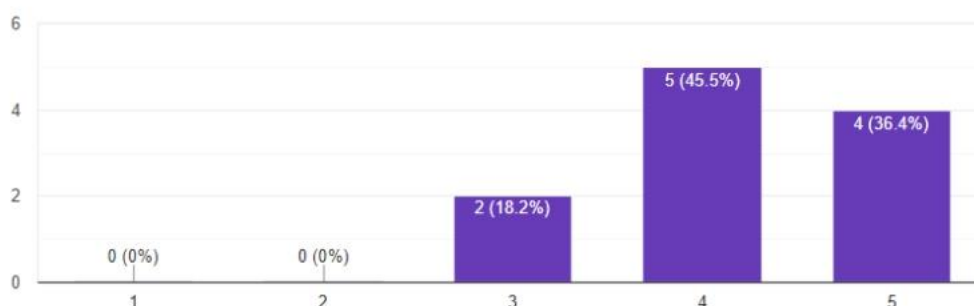


Figure 9. Training materials can be received and applied easily

3) Training materials are delivered in a clear sequence and systematics

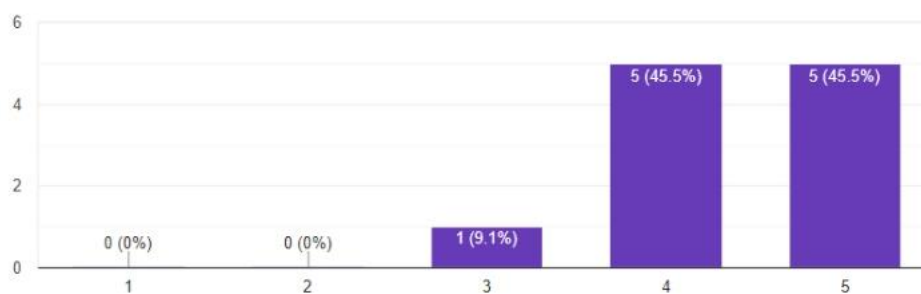


Figure 10. Training materials are delivered in a clear sequence and systematics

- 4) The resource person mastered the material presented

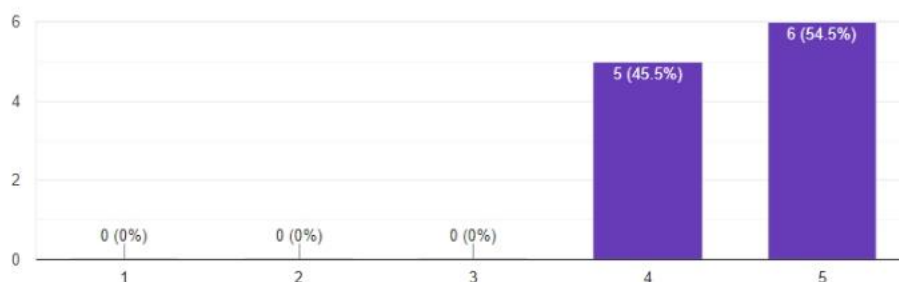


Figure 11. The resource person mastered the material presented

- 5) The resource person provided a question and answer opportunity

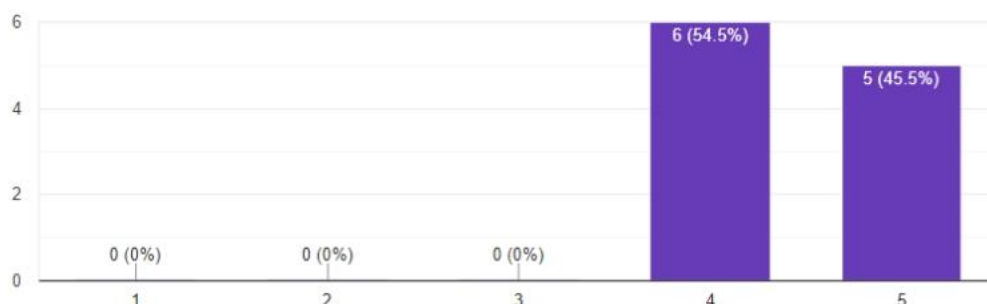


Figure 12. The resource person provided a question and answer opportunity

- 6) Trainees are motivated to write articles in scientific journals

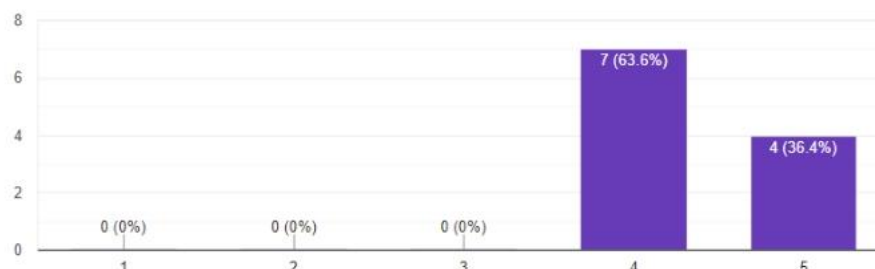


Figure 13. Motivation to write articles in scientific journals

The training activity for writing scientific articles was attended by 50 productive teachers at SMKN 1 Sawit (SMKN 1 Sawit Sawit). Based on the results achieved in this activity, among others, teachers have increased the motivation of teachers to write papers, conceptual articles and research articles and can increase understanding, ability and skills of teachers writing scientific papers. Teachers have a basic understanding of how to identify, select and formulate topics and titles, compile *outlines*, collect writing materials, organize, and conceptualize writing, as well as scientific writing and editing using mendeley software. With this training activity, teachers have sufficient provisions about skills in using the *Online Journal System* (OJS) and using *Mendeley software* to manage references.

Service activities took place well in conducive conditions, where participants attended as much as 100% according to the quota of the number of participants set. Training participants pay close attention and enthusiasm to the material presented. During the activity, almost 70% of the teacher participants asked a lot of questions and discussions related to the basics and tips for writing scientific papers, as well as strategies in publishing scientific articles in reputable journals at the national level, from the results of the discussions that occurred teachers had obtained 50% of the direction of the training to be carried out, this was seen from several problems and titles that began to be proposed. With the discussion according to (Sagala & Pembelajaran, 2009) Scientific discussions are carried out responsively in which they contain opinions and studies of ideas that start from a problem that is finally

tested which eventually results in a problem solution to find the truth. Suggestions and input of participants on the implementation of scientific article writing training include: It is necessary to continue mentoring, the need to deliver examples of writing article titles, assistance until the completion of making articles, as long as mentoring should be made a group so that we can easily communicate, it is necessary to apply intensive continuous assistance and hope that guidance is carried out until the journal is published. Proposals for future training topics include: Easy ways to write and publish books, Pendampingan and preparation of Classroom Action (PTK) research, easy ways to draw graphs with virtual laboratories, Technical making journal reports with applications until finished and published, training to determine the type and method of research. The following is documentation of mentoring activities for the preparation of scientific articles in the National Journal for teachers of SMKN 1 Sawit Boyolali.



Figure 14. Opening by the principal and Speaker by the activity Implementation Team



Figure 15. Mentoring stage and photos with participants with the implementation team

CONCLUSION

From the results of the activity, the trainee teachers understand the rules and methods of writing scientific papers and are able to write draft scientific articles. Through the assistance that has been carried out, it shows the progress of teacher progress, especially in a more orderly writing system in accordance with the guidebook for writing scientific papers, as well as the direction of goals in the form of research methods and procedures. Teachers have enthusiasm to participate in training activities reaching 100%. The results of this training activity teachers as participants are able to understand the rules and procedures in writing scientific papers, the process of stages in making articles and guidance in publishing articles with the help of mendeley software. This continuous activity is expected to improve teachers in producing scientific papers that can be published in reputable journals that are used as requirements for improving professional competence.

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